

5. (amended) [The nonwoven web material of claim 1 wherein] A nonwoven web material comprising wet-laid fibers wherein the dominant fiber component is unpulped long natural fiber bundles and the web includes a pulp fiber component.

7. (twice amended) The nonwoven web material of claim 6 wherein the synthetic fiber component is selected from [the group consisting and] cellulose acetate, viscose rayon, nylon [or] and polyolefin fibers.

11. (amended) A composite multilayer sheet material comprising [the nonwoven web of claim 1] a wet-laid nonwoven fibrous web material wherein the dominant fiber component is unpulped long natural fiber bundles and a pulp web secured thereto.

REMARKS

Reconsideration of the various objections and rejections set forth in the Office Action dated May 1, 2001 is respectfully requested in view of the above amendment and following remarks.

This amendment is being filed in conjunction with a Continued Prosecution Application. Claims 1,3,5,7 and 11 have been amended. No claims have been added or cancelled. Upon entry of the amendment, claims 1-17 will be pending in the application.

Claims 5 and 11 have been amended only to explicitly incorporate the features of claim 1 referenced therein. The amendments are supported by the claims as filed.

Accordingly, Applicants assert that these amended claims do not constitute a narrowing within the meaning of Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 56 USPQ2d 1865 (Fed. Cir. 2000).

Claims 1,3 and 7 have been amended to clarify the full scope and breadth of the invention notwithstanding Applicants' belief that the claims may have been allowable as originally filed. The amendments are supported by the claims as filed. Accordingly, Applicants assert that these amended claims do not constitute a narrowing within the

meaning of Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 56 USPQ2d 1865 (Fed. Cir. 2000).

Claims 5 and 11-17 were objected to as being dependent upon a rejected base claim but were indicated as being allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim. Applicants have rewritten claims 5 and 11 as independent claims. Claims 5 and 11-17 are now in condition to overcome the above objection.

Claims 1-3, 6-7 and 10 were rejected under 35 U.S.C. §102(b) as having each and every feature and relationship anticipated by U.S. Patent No. 4,418,031 to Doerer et al. Applicants have amended claim 1 to move the limitation of wet-laid fibers from the preamble into the body. As amended claim 1 recites "A nonwoven web material comprising wet-laid fibers wherein the dominant fiber component is unpulped long natural fiber bundles." Claims 2-4 and 6-10 being dependent on claim 1 thereby inherit this limitation.

The Doerer reference at column 2, lines 37-38 states, underlining added, "This invention, however, relates to a dry process and product made therefrom." The Doerer reference at column 2, lines 43-45 states, underlining added, "It is a primary object of this invention to provide a unique dry process of forming a flexible mat . . ." The Doerer reference at column 2, lines 54-56 states, underlining added, "Products having far more difficult and complex shapes can be made from the material produced by this new dry process . . ." The Doerer reference at column 5, line 58 to column 6, line 9 states, underlining added:

Products can be molded of the material made by the dry process of this invention with configurations just as complex and with bends just as sharp and angles of as small radii as by the wet slurry process; and yet this dry process, together with the subsequent molding of the product, is faster and less expensive than the wet slurry process. The

wet slurry process requires substantially greater energy input than this dry process and subsequent molding operation in order to remove the great amount of moisture inherent in the wet slurry process. The wet slurry process requires special equipment to handle the large amounts of water and to clean up the effluent. Such equipment is not needed in this dry process. The wet slurry process also requires more than one mold to make a product, whereas with the material made by this dry process a product is formed from the mat in a single step in a single mold.

Claim 1 of the Doerer reference in one pertinent part states:

" 1. A two-stage method of manufacturing a permanent rigid shaped end product comprising:

(1) in a first stage and by a dry process . . ."

In sum, it is clear that the Doerer reference pertains only to a dry laying process, does not teach or suggest wet-laid fibers and in fact distinguishes the process and material therein from the wet-laid fibers recited in Applicants' claim 1. For at least the above reasons, the Doerer reference does not teach or suggest Applicants' invention as embodied in amended claim 1. Claim 1, and claims dependent therefrom, are patentable for at least this reason.

Claims 1-4 and 6-7 were rejected under 35 U.S.C. §102(b) as having each and every feature and relationship anticipated by European Patent EP 0908303A2 to Beard et al.

The Beard reference at column 1, lines 35-38 states, underlining added, "The batt is preferably copolymer polyester fibers which . . . are carded, lapped and heated to define the batt." The Beard reference at column 2, lines 43-46 states, underlining added, "The batt is made by carding the raw fibers which are then supplied to a lapping machine for vertically pleating the fibers to form a batt . . ." Claims 23 and 27 of the Beard reference in one pertinent part state, underlining added: "A method of manufacturing an interior panel of a vehicle comprising the steps of: carding fibers of

copolymeric material; lapping the carded fibers to form a pleated batt;...”

Additionally, the Beard reference teaches that the carded and lapped batt is "enclosed between two layers of polyester scrim". See column 1, lines 42-43. The Beard reference at column 2, lines 18-19 states "On opposite sides of the batt are relatively thin upper and lower mats 14 and 16, respectively,..." The fibers of the upper and lower mats are "carded to singulate them and randomly dropped on a conveyor to form a random pattern of crisscrossed fibers which are blended with the thermoplastic fibers..." See Beard, column 3, lines 7-8, underlining added.

In sum, it is clear that the Beard reference pertains only to a dry carding process followed by a lapping process and does not disclose wet-laid fibers as recited in Applicants' disclosure. For the above reasons the Beard reference does not teach or suggest Applicants' invention as embodied in amended claim 1. Claim 1, and claims dependent therefrom, are patentable for at least this reason.

Claims 8 and 9 were rejected under 35 U.S.C. §103(a) as having each and every feature and relationship suggested by the above Doerer reference as applied to claims 1-3, 6-7 and 10. As stated in MPEP §2143, "To establish a *prima facie* case of obviousness three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." As discussed above, the Doerer reference is deficient in teaching or suggesting each and every limitation and relationship of Applicants' invention. Further, when the Doerer reference is "considered in its entirety, including portions that would lead away from the claimed invention" as required by MPEP §2141.02 it is clear that the Doerer reference provides neither motivation to modify the teachings therein to include wet-laid fibers nor reasonable expectation of success in using wet-laid fibers. In fact, as discussed above, the Doerer reference strongly

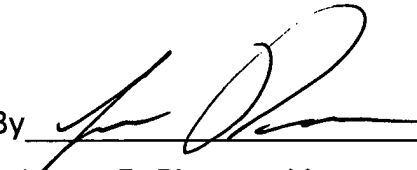
teaches away from use of wet-laid fibers. Thus, the Doerer reference does not meet the legally established standard to establish a *prima facie* case of obviousness under the requirements of MPEP §2143. The Doerer reference does not teach or suggest Applicants' invention as embodied in claims 8 and 9. Claims 8 and 9 are patentable for at least the above reasons.

In summary, Applicants have addressed each of the objections and rejections within the Office Action mailed on 5/1/2001. The cited references have been found lacking in both anticipatory and suggestive effect. It is believed the application now stands in condition for allowance, and prompt favorable action thereon is earnestly solicited.

Respectfully submitted,

Rui B. FERREIRA et al

By



James E. Piotrowski
Registration No. 43,860
Alix, Yale & Ristas, LLP
Attorney for Applicant

Date: August 31, 2001
750 Main Street
Hartford, CT 06103-2721
(860) 527-9211
Our Ref: DEXNON/087/PC/US

Clean Copy of the Amendment

1. A nonwoven web material comprising wet-laid fibers wherein the dominant fiber component is unpulped long natural fiber bundles.

3. The nonwoven web material of claim 1 wherein the natural fiber bundles are selected from sisal, abaca, henequen, kenaf and jute.

5. A nonwoven web material comprising wet-laid fibers wherein the dominant fiber component is unpulped long natural fiber bundles and the web includes a pulp fiber component.

7. The nonwoven web material of claim 5 wherein the synthetic fiber component is selected from cellulose acetate, viscose rayon, nylon and polyolefin fibers.

11. A composite multilayer sheet material comprising a wet-laid nonwoven fibrous web material wherein the dominant fiber component is unpulped long natural fiber bundles and a pulp web secured thereto.